

Map Unit Description (MN)

Traverse County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

26--Aazdahl clay loam

Aazdahl

<i>Extent:</i> 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> rises on moraines, rises on till-floored lake plains	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 0 to 2 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .20
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 1
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C
<i>Drainage class:</i> moderately well drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay loam	moderate	1.67 to 1.87 in	6.6 to 7.3
Bw -- 10 to 18 in	clay loam	moderately slow	1.41 to 1.57 in	6.6 to 7.8
Bk,C -- 18 to 60 in	clay loam	moderately slow	5.84 to 7.09 in	7.4 to 8.4

34--Parnell silty clay loam

Parnell

<i>Extent:</i> 95 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> depressions on moraines, depressions on till-floored lake plains	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> local alluvium over loamy glacial till	<i>Kw factor (surface layer)</i> .28
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 3w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	silty clay loam	moderately slow	2.91 to 3.55 in	6.1 to 7.8
Btg,BCg -- 16 to 60 in	silty clay	slow	5.68 to 8.30 in	6.1 to 7.8

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46--Borup loam

Borup

Extent: 90 percent of the unit
Landform(s): swales on lake plains
Slope gradient: 0 to 2 percent
Parent material: loamy over sandy lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderately rapid	1.97 to 2.26 in	7.4 to 8.4
Bkg -- 10 to 25 in	very fine sandy loam	moderately rapid	2.61 to 3.07 in	7.4 to 8.4
Cg -- 25 to 60 in	loamy very fine sand	rapid	5.20 to 6.58 in	7.4 to 8.4

47--Colvin silty clay loam

Colvin

Extent: 90 percent of the unit
Landform(s): swales on lake plains
Slope gradient: 0 to 1 percent
Parent material: silty lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderately slow	1.97 to 2.17 in	6.6 to 8.4
Ak,Bkg,Cg -- 10 to 46 in	silty clay loam	moderately slow	5.80 to 7.24 in	7.4 to 9.0
2Cg -- 46 to 60 in	loam	moderately slow	2.20 to 2.76 in	7.4 to 9.0

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51--La Prairie silt loam

La Prairie, occasionally flooded

Extent: 90 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: silty alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	silt loam	moderate	1.00 to 1.30 in	6.6 to 8.4
A1,A2,A3 -- 6 to 30 in	silt loam	moderate	4.08 to 5.28 in	6.6 to 8.4
Bw -- 30 to 43 in	silty clay loam	moderate	1.95 to 2.86 in	6.6 to 8.4
Cg -- 43 to 60 in	silt loam	moderate	2.54 to 3.72 in	6.6 to 8.4

56--Fargo silty clay loam

Fargo

Extent: 85 percent of the unit
Landform(s): flats on lake plains, swales on lake plains
Slope gradient: 0 to 2 percent
Parent material: clayey lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: rare
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay loam	slow	1.42 to 1.81 in	6.6 to 7.8
BA -- 8 to 16 in	silty clay	slow	1.16 to 1.41 in	6.6 to 8.4
Bg,Cg -- 16 to 60 in	silty clay	slow	6.12 to 7.43 in	7.9 to 8.4

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57--Fargo silty clay

Fargo

Extent: 85 percent of the unit

Landform(s): flats on lake plains, swales on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silty clay	slow	1.06 to 1.28 in	6.6 to 7.8
BA,Bg -- 7 to 23 in	silty clay	slow	2.20 to 2.68 in	6.6 to 8.4
Cg -- 23 to 60 in	silty clay	slow	5.18 to 6.29 in	7.9 to 8.4

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58--Kittson loam

Kittson

<i>Extent:</i> 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> rises on moraines, rises on till-floored lake plains	<i>Wind erodibility group (WEG):</i> 5
<i>Slope gradient:</i> 0 to 3 percent	<i>Wind erodibility index (WEI):</i> 56
<i>Parent material:</i> glaciolacustrine deposits over loamy glacial till	<i>Kw factor (surface layer)</i> .24
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 1
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C
<i>Drainage class:</i> moderately well drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,Bw1 -- 0 to 16 in	loam	moderate	3.23 to 3.55 in	6.6 to 7.8
2Bw2 -- 16 to 24 in	fine sandy loam	moderate	1.34 to 1.50 in	6.6 to 7.8
2Bk -- 24 to 34 in	clay loam	moderate	1.48 to 1.77 in	7.4 to 8.4
2C -- 34 to 60 in	clay loam	moderate	3.90 to 4.68 in	7.4 to 8.4

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60--Glyndon loam

Glyndon

Extent: 85 percent of the unit

Landform(s): flats on lake plains, rises on lake plains

Slope gradient: 0 to 2 percent

Parent material: silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.26 in	7.4 to 9.0
Bk1,Bk2 -- 10 to 25 in	loam	moderately rapid	2.61 to 3.07 in	7.4 to 9.0
C1,C2g -- 25 to 60 in	very fine sandy loam	moderately rapid	5.20 to 6.58 in	7.4 to 9.0

67A--Bearden silt loam, 0 to 2 percent slopes

Bearden

Extent: 85 percent of the unit

Landform(s): rises on lake plains, flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	silt loam	moderate	2.20 to 2.65 in	7.4 to 8.4
Bk1,Bk2 -- 11 to 29 in	silt loam	moderately slow	2.90 to 3.98 in	7.4 to 8.4
C -- 29 to 60 in	silt loam	moderately slow	4.91 to 6.76 in	7.4 to 8.4

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67B--Bearden silty clay loam, 2 to 6 percent slopes

Bearden

<i>Extent:</i> 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on lake plains	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 2 to 6 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> silty lacustrine deposits	<i>Kw factor (surface layer)</i> .24
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> moderately well drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silty clay loam	moderately slow	1.20 to 1.63 in	7.4 to 8.4
Bk -- 7 to 17 in	silty clay loam	moderately slow	1.57 to 2.17 in	7.4 to 8.4
C -- 17 to 60 in	silty clay loam	moderately slow	6.87 to 9.44 in	7.4 to 8.4

108--McIntosh silt loam

McIntosh

<i>Extent:</i> 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> rises on till-floored lake plains, flats on till-floored lake plains	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 0 to 2 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> silty glaciolacustrine deposits over loamy glacial till	<i>Kw factor (surface layer)</i> .32
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2s
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C
<i>Drainage class:</i> moderately well drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.57 to 1.89 in	7.4 to 8.4
Ak,Bk1,Bk2 -- 8 to 27 in	silt loam	moderate	3.02 to 4.16 in	7.4 to 8.4
2C -- 27 to 60 in	clay loam	moderate	4.63 to 6.28 in	7.4 to 8.4

Map Unit Description (MN)

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141--Egeland loam

Egeland

Extent: 85 percent of the unit

Landform(s): rises on beach ridges, rises on beach terraces

Slope gradient: 0 to 3 percent

Parent material: loamy mantle over sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.55 to 2.83 in	5.6 to 7.3
Bw -- 14 to 19 in	sandy loam	moderately rapid	0.43 to 0.71 in	6.1 to 7.8
C1,C2,C3 -- 19 to 41 in	loamy sand	moderately rapid	1.76 to 2.65 in	7.4 to 8.4
2C4 -- 41 to 60 in	loam	moderate	2.27 to 3.02 in	7.4 to 8.4

Map Unit Description (MN)

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171B--Formdale clay loam, 1 to 6 percent slopes

Formdale

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	clay loam	moderate	1.34 to 1.50 in	6.1 to 7.3
Bw1,Bw2 -- 8 to 18 in	clay loam	moderately slow	1.74 to 1.94 in	6.6 to 7.8
Bk -- 18 to 42 in	clay loam	moderately slow	3.36 to 4.56 in	7.4 to 8.4
C -- 42 to 60 in	clay loam	moderately slow	2.48 to 3.37 in	7.4 to 8.4

Map Unit Description (MN)

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184--Hamerly clay loam

Hamerly

Extent: 85 percent of the unit
Landform(s): hillslopes on moraines, rises on till-floored lake plains
Slope gradient: 0 to 3 percent
Parent material: loamy glacial till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	clay loam	moderate	1.54 to 1.99 in	6.6 to 8.4
Bk1,Bk2 -- 9 to 32 in	clay loam	moderate	3.43 to 4.34 in	7.4 to 8.4
C1,C2 -- 32 to 60 in	clay loam	moderately slow	3.91 to 5.31 in	7.4 to 8.4

236--Vallers clay loam

Vallers

Extent: 85 percent of the unit
Landform(s): flats on lake plains, rims on depressions on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: loamy glacial till
Restrictive feature(s): greater than 60 inches
Flooding: rare
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay loam	moderately slow	1.77 to 2.17 in	7.4 to 8.4
Bkg1,Bkg2 -- 10 to 24 in	clay loam	moderately slow	2.13 to 2.69 in	7.4 to 8.4
Cg1,Cg2 -- 24 to 60 in	clay loam	moderately slow	6.09 to 6.81 in	7.4 to 8.4

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245B--Lohnes sandy loam, 1 to 6 percent slopes

Lohnes

Extent: 85 percent of the unit
Landform(s): ridges on lake plains, hillslopes on moraines
Slope gradient: 1 to 6 percent
Parent material: sandy and gravelly outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	rapid	1.42 to 1.84 in	6.6 to 7.8
C -- 14 to 60 in	coarse sand	rapid	1.37 to 3.20 in	7.4 to 8.4

276--Oldham silty clay loam

Oldham

Extent: 90 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: local clayey alluvium
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderately slow	1.28 to 1.87 in	6.6 to 7.8
Bg1,Bg2 -- 10 to 44 in	silty clay loam	moderately slow	4.80 to 6.85 in	7.4 to 8.4
Cg -- 44 to 60 in	silty clay loam	moderately slow	2.20 to 3.15 in	7.4 to 8.4

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293--Swenoda loam

Swenoda

Extent: 85 percent of the unit
Landform(s): hillslopes on till-floored lake plains
Slope gradient: 0 to 3 percent
Parent material: loamy glaciolacustrine deposits over lake washed till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 23 in	loam	moderate	4.11 to 4.57 in	6.1 to 7.3
Bw -- 23 to 31 in	sandy loam	moderately rapid	0.91 to 1.41 in	6.6 to 7.8
Bk,2C -- 31 to 60 in	silt loam	moderate	4.89 to 5.75 in	7.4 to 8.4

343--Wheatville silt loam

Wheatville

Extent: 85 percent of the unit
Landform(s): rises on lake plains
Slope gradient: 0 to 2 percent
Parent material: loamy over clayey lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderately rapid	1.42 to 1.73 in	7.4 to 8.4
Bk1,Bk2,C1 -- 8 to 35 in	very fine sandy loam	moderately rapid	4.07 to 5.70 in	7.4 to 8.4
2C2 -- 35 to 60 in	silty clay	slow	2.48 to 3.47 in	7.4 to 7.8

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344--Quam silt loam

Quam

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> depressions on lake plains, depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> local alluvium over loamy glacial till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer):</i> .37</p> <p><i>Land capability, nonirrigated:</i> 3w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 14 in	silt loam	moderate	3.12 to 3.40 in	6.6 to 7.8
A1,A2 -- 14 to 37 in	silty clay loam	moderately slow	3.65 to 5.02 in	6.6 to 7.8
Cg1,Cg2 -- 37 to 60 in	silty clay loam	moderately slow	3.20 to 4.34 in	7.4 to 8.4

371--Clontarf sandy loam

Clontarf

<p><i>Extent:</i> 85 percent of the unit</p> <p><i>Landform(s):</i> flats on lake plains, flats on outwash plains</p> <p><i>Slope gradient:</i> 0 to 3 percent</p> <p><i>Parent material:</i> loamy mantle over sandy outwash deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 3</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer):</i> .10</p> <p><i>Land capability, nonirrigated:</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	6.1 to 7.3
A1,A2,Bw -- 8 to 29 in	sandy loam	moderately rapid	2.55 to 4.04 in	6.1 to 7.8
2C1,2C2 -- 29 to 60 in	sand	rapid	1.54 to 2.76 in	6.6 to 7.8

Map Unit Description (MN)

Traverse County, Minnesota

418--Lamoure silty clay loam

Lamoure, occasionally flooded

Extent: 90 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: silty alluvial deposits
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1,A2 -- 0 to 24 in	silty clay loam	moderate	4.56 to 5.28 in	7.4 to 8.4
Cg1,Cg2,Ab -- 24 to 55 in	silty clay loam	moderate	5.29 to 6.22 in	7.4 to 8.4
C'g -- 55 to 60 in	silty clay loam	moderate	0.80 to 0.94 in	7.4 to 8.4

434--Perella silty clay loam

Perella

Extent: 85 percent of the unit
Landform(s): depressions on lake plains, swales on lake plains
Slope gradient: 0 to 1 percent
Parent material: silty glaciolacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	silty clay loam	moderate	3.26 to 4.17 in	6.6 to 7.8
Bg1,Bg2,Cg1 -- 18 to 41 in	silty clay loam	moderate	3.43 to 5.02 in	6.6 to 7.8
2Cg2 -- 41 to 60 in	clay loam	moderate	3.02 to 4.16 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

437E--Buse clay loam, 18 to 35 percent slopes

Buse

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 18 to 35 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ak -- 0 to 5 in	clay loam	moderately slow	0.87 to 1.13 in	6.6 to 8.4
Bk,C -- 5 to 60 in	clay loam	moderately slow	7.66 to 10.40 in	7.4 to 8.4

450--Rauville silt loam

Rauville, frequently flooded

Extent: 90 percent of the unit

Landform(s): swales on flood plains

Slope gradient: 0 to 1 percent

Parent material: silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .32

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2,A3 -- 0 to 33 in	silt loam	moderate	6.28 to 7.28 in	7.4 to 8.4
Cg1,Cg2,Cg3 - 33 to 60 in	silty clay loam	moderate	4.55 to 5.35 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

494B--Darnen loam, 1 to 6 percent slopes

Darnen

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 6 percent

Parent material: local alluvium over glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 24 in	loam	moderate	4.32 to 4.80 in	6.6 to 7.8
Bw,Bk -- 24 to 37 in	loam	moderate	1.95 to 2.47 in	6.1 to 7.8
C -- 37 to 60 in	loam	moderate	3.20 to 4.34 in	7.4 to 8.4

582--Roliss clay loam

Roliss

Extent: 85 percent of the unit

Landform(s): drainageways on lake plains, flats on lake plains

Slope gradient: 0 to 1 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay loam	moderately slow	1.77 to 2.17 in	6.6 to 8.4
Bg -- 10 to 17 in	clay loam	moderate	1.06 to 1.35 in	7.4 to 8.4
Bkg -- 17 to 22 in	clay loam	moderate	0.77 to 0.97 in	7.4 to 8.4
Cg1,Cg2 -- 22 to 60 in	clay loam	moderate	5.67 to 7.18 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

642--Clearwater silty clay loam

Clearwater

Extent: 85 percent of the unit

Landform(s): drainageways on lake plains, flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey glacial till or lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silty clay loam	moderately slow	1.20 to 1.56 in	6.6 to 7.8
Bg1,Bg2,Bg3 -- 7 to 50 in	silty clay	slow	6.44 to 7.72 in	7.4 to 8.4
Cg -- 50 to 60 in	silty clay loam	slow	1.48 to 1.77 in	7.4 to 8.4

646B--Peever clay, 2 to 6 percent slopes

Peever

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay	moderately slow	1.87 to 2.17 in	6.1 to 7.3
Bt1,Bt2 -- 10 to 23 in	clay	moderately slow	1.43 to 2.47 in	6.6 to 7.8
Bk -- 23 to 36 in	clay	moderately slow	1.04 to 2.21 in	7.4 to 8.4
C -- 36 to 60 in	clay	moderately slow	1.92 to 4.08 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

698--Doran clay loam

Doran

Extent: 85 percent of the unit

Landform(s): flats on lake plains, rises on lake plains

Slope gradient: 0 to 3 percent

Parent material: water-worked glacial till or lacustrine sediments over over glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	clay loam	moderately slow	1.77 to 2.26 in	6.6 to 7.3
Bt --	10 to 16 in	clay	moderately slow	0.94 to 1.20 in	6.6 to 7.8
Bk,C1,C2 --	16 to 60 in	clay loam	slow	6.12 to 6.99 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

814--Hamerly-Lindaas clay loams

Hamerly

<p><i>Extent:</i> 50 percent of the unit</p> <p><i>Landform(s):</i> flats on till-floored lake plains, rises on till-floored lake plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> loamy glacial till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 4L</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer):</i> .24</p> <p><i>Land capability, nonirrigated:</i> 2s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	clay loam	moderate	1.54 to 1.99 in	6.6 to 8.4
Bk -- 9 to 32 in	clay loam	moderate	3.43 to 4.34 in	7.4 to 8.4
C -- 32 to 60 in	clay loam	moderately slow	3.91 to 5.31 in	7.4 to 8.4

Lindaas

<p><i>Extent:</i> 35 percent of the unit</p> <p><i>Landform(s):</i> depressions on lake plains, drainageways on lake plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> silty and clayey lacustrine sediments</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> rare</p> <p><i>Ponding:</i> occasional</p> <p><i>Drainage class:</i> poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer):</i> .20</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	clay loam	moderately rapid	1.87 to 2.09 in	6.6 to 7.3
Btg -- 11 to 32 in	clay	slow	2.92 to 3.55 in	6.6 to 7.8
Bkg,Cg -- 32 to 60 in	silty clay loam	moderate	4.19 to 6.15 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

816--Fargo clay, saline

Fargo, saline

Extent: 90 percent of the unit

Landform(s): drainageways on lake plains, flats on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 3s

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay	slow	1.48 to 1.77 in	6.6 to 7.8
BA,Bg -- 10 to 15 in	clay	slow	0.72 to 0.87 in	6.6 to 8.4
Cg -- 15 to 60 in	clay	slow	6.28 to 7.63 in	7.9 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

821--Doran-Lindaas silty clay loams

Doran

Extent: 50 percent of the unit

Landform(s): flats on lake plains, rises on lake plains

Slope gradient: 0 to 2 percent

Parent material: water-worked glacial till or lacustrine sediments over over glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderately slow	1.77 to 2.26 in	6.6 to 7.3
Bt -- 10 to 16 in	clay	moderately slow	0.94 to 1.20 in	6.6 to 7.8
Bk,C -- 16 to 60 in	clay loam	slow	6.12 to 6.99 in	7.4 to 8.4

Lindaas

Extent: 35 percent of the unit

Landform(s): depressions on lake plains, drainageways on lake plains

Slope gradient: 0 to 1 percent

Parent material: silty and clayey lacustrine sediments

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: occasional

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderately rapid	1.77 to 2.26 in	6.6 to 7.3
Btg -- 10 to 26 in	clay	slow	2.26 to 2.74 in	6.6 to 7.8
Bkg,Cg -- 26 to 60 in	clay loam	moderate	5.08 to 7.45 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

822B--Peever-Buse complex, 2 to 6 percent slopes

Peever

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay	moderately slow	1.87 to 2.17 in	6.1 to 7.3
Bt1,Bt2 -- 10 to 23 in	clay	moderately slow	1.43 to 2.47 in	6.6 to 7.8
Bk,C -- 23 to 60 in	clay	moderately slow	2.96 to 6.29 in	7.4 to 8.4

Buse

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 3 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Apk -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.56 in	6.6 to 8.4
Bk,C -- 7 to 60 in	clay loam	moderately slow	7.39 to 10.02 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

900--Hamerly-Aazdahl-Lindaas complex

Hamerly

Extent: 40 percent of the unit
Landform(s): flats on till-floored lake plains, rises on till-floored lake plains
Slope gradient: 0 to 3 percent
Parent material: loamy glacial till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	clay loam	moderate	1.87 to 2.43 in	6.6 to 8.4
Bk -- 11 to 27 in	clay loam	moderate	2.36 to 2.99 in	7.4 to 8.4
C -- 27 to 60 in	clay loam	moderately slow	4.63 to 6.28 in	7.4 to 8.4

Aazdahl

Extent: 30 percent of the unit
Landform(s): rises on moraines, rises on till-floored lake plains
Slope gradient: 0 to 2 percent
Parent material: loamy glacial till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .20
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	clay loam	moderate	2.54 to 2.84 in	6.6 to 7.3
Bw -- 15 to 20 in	clay loam	moderately slow	0.87 to 0.97 in	6.6 to 7.8
Bk,C -- 20 to 60 in	clay loam	moderately slow	5.57 to 6.76 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

900--Hamerly-Aazdahl-Lindaas complex

Lindaas

Extent: 30 percent of the unit

Landform(s): depressions on lake plains, drainageways on lake plains

Slope gradient: 0 to 1 percent

Parent material: silty and clayey lacustrine sediments

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: occasional

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,Btg1 --	0 to 19 in	silty clay loam	moderately rapid	3.40 to 4.35 in	6.6 to 7.3
Btg2,Bk --	19 to 28 in	silty clay	slow	1.27 to 1.54 in	6.6 to 7.8
Cg --	28 to 60 in	silty clay loam	moderate	4.78 to 7.02 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

915B--Formdale-Buse clay loams, 2 to 6 percent slopes

Formdale

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw -- 10 to 17 in	clay loam	moderately slow	1.20 to 1.35 in	6.6 to 7.8
Bk,C -- 17 to 60 in	clay loam	moderately slow	6.01 to 8.15 in	7.4 to 8.4

Buse

Extent: 40 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 3 to 6 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Apk -- 0 to 10 in	clay loam	moderately slow	1.67 to 2.17 in	6.6 to 8.4
Bk,C -- 10 to 60 in	clay loam	moderately slow	7.00 to 9.50 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

915C2--Buse-Formdale clay loams, 6 to 14 percent slopes, eroded

Buse, eroded

Extent: 45 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 14 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Apk -- 0 to 9 in	clay loam	moderately slow	1.54 to 1.99 in	6.6 to 8.4
Bk,C -- 9 to 60 in	clay loam	moderately slow	7.11 to 9.65 in	7.4 to 8.4

Formdale, eroded

Extent: 40 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 14 percent

Parent material: loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	clay loam	moderate	1.34 to 1.50 in	6.1 to 7.3
Bw -- 8 to 25 in	clay loam	moderately slow	2.94 to 3.29 in	6.6 to 7.8
Bk,C -- 25 to 60 in	clay loam	moderately slow	4.85 to 6.58 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

922--Hamerly-Parnell complex

Hamerly

<i>Extent:</i> 65 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 0 to 3 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .24
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2s
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> somewhat poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	clay loam	moderate	1.34 to 1.73 in	6.6 to 8.4
Bk -- 8 to 28 in	clay loam	moderate	3.01 to 3.81 in	7.4 to 8.4
C -- 28 to 60 in	clay loam	moderately slow	4.46 to 6.06 in	7.4 to 8.4

Parnell

<i>Extent:</i> 25 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> depressions on moraines	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> local alluvium over loamy glacial till	<i>Kw factor (surface layer)</i> .28
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 3w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	silty clay loam	moderately slow	3.26 to 3.98 in	6.1 to 7.8
Btg -- 18 to 39 in	silty clay loam	slow	2.71 to 3.96 in	6.1 to 7.8
Bkg,Cg -- 39 to 60 in	clay loam	slow	2.30 to 3.96 in	6.6 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

948--McIntosh-Lindaas complex

McIntosh

Extent: 65 percent of the unit
Landform(s): rises on till-floored lake plains, flats on till-floored lake plains
Slope gradient: 0 to 2 percent
Parent material: silty glaciolacustrine deposits over loamy glacial till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,Ak -- 0 to 14 in	silt loam	moderate	2.83 to 3.40 in	7.4 to 8.4
Bk -- 14 to 27 in	silt loam	moderate	2.02 to 2.77 in	7.4 to 8.4
2C -- 27 to 60 in	loam	moderate	4.63 to 6.28 in	7.4 to 8.4

Lindaas

Extent: 25 percent of the unit
Landform(s): depressions on lake plains, drainageways on lake plains
Slope gradient: 0 to 1 percent
Parent material: silty and clayey lacustrine sediments
Restrictive feature(s): greater than 60 inches
Flooding: rare
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,Btg1 -- 0 to 16 in	silty clay loam	moderately rapid	2.91 to 3.71 in	6.6 to 7.3
Btg2,Bk -- 16 to 33 in	silty clay	slow	2.37 to 2.88 in	6.6 to 7.8
Cg -- 33 to 60 in	silt loam	moderate	4.02 to 5.89 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

1020--Udorthents, sloping

Udorthents, sloping

Extent: 100 percent of the unit

Landform(s): hillslopes on lake plains

Slope gradient: 0 to 25 percent

Parent material: loamy glacial till and clayey alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Traverse County, Minnesota

1030--Udorthents-Pits, complex

Udorthents

Extent: 50 percent of the unit

Landform(s): beach ridges on lake plains, hillslopes on moraines

Slope gradient: 0 to 5 percent

Parent material: sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group:

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Pits

Extent: 50 percent of the unit

Landform(s): beach ridges on lake plains, hillslopes on moraines

Slope gradient:

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Traverse County, Minnesota

1356--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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1916--Lindaas clay loam

Lindaas

Extent: 85 percent of the unit

Landform(s): depressions on lake plains, drainageways on lake plains

Slope gradient: 0 to 1 percent

Parent material: silty and clayey lacustrine sediments

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: occasional

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	clay loam	moderately rapid	1.54 to 1.72 in	6.6 to 7.3
Btg -- 9 to 25 in	clay	slow	2.26 to 2.74 in	6.6 to 7.8
Bkg,C -- 25 to 60 in	clay loam	moderate	5.20 to 7.62 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

1918--Croke loam

Croke

Extent: 85 percent of the unit

Landform(s): rises on lake plains, flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: loamy over clayey glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderately rapid	1.81 to 2.17 in	6.6 to 7.8
Bw,C1 -- 9 to 25 in	very fine sandy loam	moderately rapid	2.74 to 3.55 in	6.6 to 8.4
2Cg1,2Cg2 -- 25 to 60 in	silty clay	slow	3.46 to 5.20 in	7.9 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

1933--Bearden-Lindaas complex

Bearden

Extent: 55 percent of the unit

Landform(s): rises on lake plains, flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silt loam	moderate	1.97 to 2.36 in	7.4 to 8.4
Bk1,Bk2 -- 10 to 18 in	silt loam	moderately slow	1.32 to 1.82 in	7.4 to 8.4
C1,C2 -- 18 to 60 in	silt loam	moderately slow	6.68 to 9.18 in	7.4 to 8.4

Lindaas

Extent: 30 percent of the unit

Landform(s): depressions on lake plains, drainageways on lake plains

Slope gradient: 0 to 1 percent

Parent material: silty and clayey lacustrine sediments

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: occasional

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderately rapid	1.77 to 2.26 in	6.6 to 7.3
Btg -- 10 to 26 in	silty clay	slow	2.26 to 2.74 in	6.6 to 7.8
Bkg,Cg -- 26 to 60 in	clay loam	moderate	5.08 to 7.45 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

1940--Quam silty clay loam, ponded

Quam, ponded

Extent: 95 percent of the unit

Landform(s): depressions on lake plains, depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: silty local alluvium over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .32

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 30 in	silty clay loam	moderately slow	5.39 to 6.58 in	6.6 to 7.8
Cg1 --	30 to 40 in	silty clay loam	moderately slow	1.64 to 2.25 in	6.6 to 7.8
2Cg2 --	40 to 60 in	clay loam	moderately slow	2.76 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

1947--Doran silty clay loam, loamy substratum

Doran, loamy substratum

<i>Extent:</i> 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> flats on moraines, flats on till-floored lake plains, rises on till-floored lake plains	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 0 to 2 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> silty, loamy and clayey glaciolacustrine deposits	<i>Kw factor (surface layer)</i> .37
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2w
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> D
<i>Drainage class:</i> somewhat poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderately slow	1.77 to 2.26 in	6.6 to 7.3
Bt -- 10 to 16 in	silty clay	moderately slow	0.94 to 1.20 in	6.6 to 7.8
Bk -- 16 to 40 in	silty clay loam	slow	3.84 to 5.28 in	7.4 to 8.4
2C -- 40 to 60 in	very fine sandy loam	moderately rapid	3.54 to 3.94 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

1948--Fargo-Lindaas silty clay loams

Fargo

Extent: 50 percent of the unit
Landform(s): flats on lake plains
Slope gradient: 0 to 2 percent
Parent material: silty and clayey glaciolacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: rare
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	silty clay loam	slow	1.98 to 2.54 in	6.6 to 7.8
BA,Bg -- 11 to 16 in	silty clay	slow	0.72 to 0.87 in	6.6 to 8.4
Cg -- 16 to 60 in	silty clay	slow	6.12 to 7.43 in	7.9 to 8.4

Lindaas

Extent: 35 percent of the unit
Landform(s): depressions, drainageways
Slope gradient: 0 to 1 percent
Parent material: silty and clayey lacustrine sediments
Restrictive feature(s): greater than 60 inches
Flooding: rare
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay loam	moderately rapid	1.42 to 1.81 in	6.6 to 7.3
Btg -- 8 to 31 in	clay	slow	3.25 to 3.95 in	6.6 to 7.8
Bkg,Cg -- 31 to 60 in	silty clay	moderate	4.31 to 6.32 in	7.4 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

1949--Gardena loam

Gardena

Extent: 90 percent of the unit

Landform(s): flats on lake plains, rises on lake plains

Slope gradient: 0 to 2 percent

Parent material: loamy glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 17 in	loam	moderate	3.05 to 3.39 in	6.6 to 7.8
Bw,C -- 17 to 60 in	very fine sandy loam	moderately rapid	7.30 to 9.44 in	7.4 to 8.4

1950--Ludden silty clay loam

Ludden, frequently flooded

Extent: 90 percent of the unit

Landform(s): swales on flood plains

Slope gradient: 0 to 1 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	slow	1.77 to 2.26 in	6.1 to 8.4
A1,A2 -- 10 to 33 in	silty clay	slow	3.02 to 3.72 in	7.9 to 8.4
Cg1,Cg2 -- 33 to 60 in	silty clay loam	slow	3.48 to 4.28 in	7.9 to 8.4

Map Unit Description (MN)

Traverse County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.